

IN THE CLAIMS:

Complete Listing and Status of the Claims

1.-259. Canceled

260. (New) A method of ameliorating stress urinary incontinence, comprising: introducing an enriched population of autologous, skeletal muscle-derived myoblasts into a site of injured, damaged, or dysfunctional urethra muscle tissue of a recipient, in an amount effective to ameliorate stress urinary incontinence.

261. (New) The method according to claim 260, wherein the skeletal muscle-derived myoblasts are histocompatibly-matched with the recipient.

262. (New) The method according to claim 260, wherein the skeletal muscle-derived myoblasts are introduced in a composition comprising a physiologically acceptable medium.

263. (New) The method according to claim 260, wherein the skeletal muscle-derived myoblasts are introduced in an amount of about 10^5 to 10^6 cells per cm^3 of tissue to be treated in a physiologically acceptable medium.

264. (New) The method according to claim 260, wherein a cloned population of the skeletal muscle-derived myoblasts is introduced into the recipient.

265. (New) The method according to claim 260, wherein the skeletal muscle-derived myoblasts are contacted with a cytokine or growth factor selected from one or more of basic fibroblast growth factor (b-FGF), insulin-like growth factor (IGF), or nerve growth factor (NGF), prior to introducing the skeletal muscle-derived myoblasts into the recipient.

266. (New) The method according to claim 260, further comprising isolating the skeletal muscle-derived myoblasts according to a culture method comprising:

- (i) plating a suspension of cells from skeletal muscle tissue in a first container, to which fibroblast cells in the muscle tissue suspension adhere;
- (ii) re-plating non-adherent cells from (i) in a second container after approximately 15% to 20% of the cells from the cell suspension have adhered to the first container;
- (iii) repeating step (ii) at least one time to enrich for an end population of viable, non-fibroblast, desmin-expressing, skeletal muscle-derived myoblasts in the second container; and
- (iv) isolating an end population of viable, non-fibroblast, desmin-expressing skeletal muscle-derived myoblasts in the culture.

267. (New) A method of ameliorating stress urinary incontinence, comprising: introducing an enriched population of autologous, skeletal muscle-derived myoblasts into a site of injured, damaged, or dysfunctional sphincter muscle tissue of a recipient, in an amount effective to ameliorate stress urinary incontinence.

268. (New) The method according to claim 267, wherein the skeletal muscle-derived myoblasts are histocompatibly-matched with the recipient.

269. (New) The method according to claim 267, wherein the skeletal muscle-derived myoblasts are introduced in a composition comprising a physiologically acceptable medium.

270. (New) The method according to claim 267, wherein the skeletal muscle-derived myoblasts are introduced in an amount of about 10^5 to 10^6 cells per cm^3 of tissue to be treated in a physiologically acceptable medium.

271. (New) The method according to claim 267, wherein a cloned population of the skeletal muscle-derived myoblasts is introduced into the recipient.

272. (New) The method according to claim 267, wherein the skeletal muscle-derived myoblasts are contacted with a cytokine or growth factor selected from one or more of basic fibroblast growth factor (b-FGF), insulin-like growth factor (IGF), or nerve growth factor (NGF), prior to introducing the skeletal muscle-derived myoblasts into the recipient.

273. (New) The method according to claim 267, further comprising isolating the skeletal muscle-derived myoblasts according to a culture method comprising:

- (i) plating a suspension of cells from skeletal muscle tissue in a first container, to which fibroblast cells in the muscle tissue suspension adhere;
- (ii) re-plating non-adherent cells from (i) in a second container after approximately 15% to 20% of the cells from the cell suspension have adhered to the first container;
- (iii) repeating step (ii) at least one time to enrich for an end population of viable, non-fibroblast, desmin-expressing, skeletal muscle-derived myoblasts in the second container; and
- (iv) isolating an end population of viable, non-fibroblast, desmin-expressing skeletal muscle-derived myoblasts in the culture.

274. (New) A method of ameliorating stress urinary incontinence, comprising: introducing an enriched population of autologous, skeletal muscle-derived myoblasts into a site of injured, damaged, or dysfunctional muscle tissue selected from urethra muscle tissue, sphincter muscle tissue, or a combination thereof, of a recipient, in an amount effective to ameliorate stress urinary incontinence.

275. (New) The method according to claim 274, wherein the skeletal muscle-derived myoblasts are histocompatibly-matched with the recipient.

276. (New) The method according to claim 274, wherein the skeletal muscle-derived myoblasts are introduced in a composition comprising a physiologically acceptable medium.

277. (New) The method according to claim 274, wherein the skeletal muscle-derived myoblasts are introduced in an amount of about 10^5 to 10^6 cells per cm^3 of tissue to be treated in a physiologically acceptable medium.

278. (New) The method according to claim 274, wherein a cloned population of the skeletal muscle-derived myoblasts is introduced into the recipient.

279. (New) The method according to claim 274, wherein the skeletal muscle-derived myoblasts are contacted with a cytokine or growth factor selected from one or more of basic fibroblast growth factor (b-FGF), insulin-like growth factor (IGF), or nerve growth factor (NGF), prior to introducing the skeletal muscle-derived myoblasts into the recipient.

280. (New) The method according to claim 274, further comprising isolating the skeletal muscle-derived myoblasts according to a culture method comprising:

- (i) plating a suspension of cells from skeletal muscle tissue in a first container, to which fibroblast cells in the muscle tissue suspension adhere;
- (ii) re-plating non-adherent cells from (i) in a second container after approximately 15% to 20% of the cells from the cell suspension have adhered to the first container;
- (iii) repeating step (ii) at least one time to enrich for an end population of viable, non-fibroblast, desmin-expressing, skeletal muscle-derived myoblasts in the second container; and
- (iv) isolating an end population of viable, non-fibroblast, desmin-expressing skeletal muscle-derived myoblasts in the culture.